Appl. No. 09/800,926 Atty. Docket: 1921-0134P

AMENDMENTS TO THE CLAIMS

- 1. (Currently amended) A NOx removal system for boilers, comprising, ammonia jet nozzles disposed on a gas passage of a boiler; and ammonia generating means connected to the jet nozzles and disposed within the- a flue.
- 2. (Previously presented) The NOx removal system of claim 1 wherein said ammonia generating means comprises an electric heater for heating a liquid to generate ammonia.
- 3. (Previously presented) The NOx removal system of claim 2 wherein said ammonia generating means comprises a screw member disposed in a cylindrical housing.
- 4. (Previously presented) The NOx removal system of claim 1 including at least one pipe connected between said ammonia generating means and said ammonia jet nozzles.
- 5. (Previously presented) The NOx removal system of claim 4 wherein said at least one pipe is disposed in said flue.
- 6. (Previously presented) In a boiler comprising a boiler body, an array of heat transfer tubes mounted inside the boiler

Appl. No. 09/800,926 1921-0134P

Atty. Docket:

body, a gas passage in the boiler body outside the array and a flue for carrying exhaust gasses away from the boiler body, the improvement comprising:

a NOx removal system comprising:

at least one ammonia jet nozzle disposed in the gas passage or the flue and a heater for generating ammonia by heating a liquid connected to the at least one ammonia jet nozzle and disposed within the flue.

- 7. (Previously presented) The device of claim 6 wherein said heater is spaced from said at least one jet nozzle and connected to said at least one jet nozzle by at least one pipe.
- 8. (Previously presented) The device of claim 6 including a screw member disposed within a cylindrical housing for moving the liquid as it is heated by the heater.
- 9. (Previously presented) The device of claim 6 wherein said heater comprises an electric heater.
- 10. (Previously presented) A method of removing NOx from exhaust gasses produced by a boiler having a gas passage connected to a flue comprising the steps of:

generating ammonia gas from a liquid at a first location;

Appl. No. 09/800,926 Atty. Docket: 1921-0134P

providing a plurality of jet nozzles in the gas passage or the flue at a distance from the first location; and

transporting the ammonia gas from the first location to the plurality of jet nozzles through a pipe disposed entirely inside the flue or disposed entirely inside the boiler and the flue.

- 11. (Previously presented) The method of claim 10 wherein said step of generating ammonia gas from a liquid at a first location comprises the step of heating the liquid in a container disposed in the flue.
- 12. (Previously presented) The method of claim 10 wherein said step of generating ammonia gas from a liquid at a first location comprises the step of using an electric heater to heat the liquid.
- 13. (Previously presented) The method of claim 11 wherein said step of heating the liquid includes the additional step of passing the liquid over a rotating screw.
- 14. (Previously presented) A NOx removal system for boilers, comprising:

ammonia jet nozzles disposed at a first location in a gas passage of a boiler or at a second location in a flue; and,

a heater for heating urea water to produce ammonia, said heater

Appl. No. 09/800,926 Atty. Docket: 1921-0134P

being located in the flue at a third location spaced from said first and second locations; and

a pipe connected between the ammonia jet nozzles and the heater for carrying ammonia gas from the heater to the ammonia jet nozzles.

15. (Previously presented) The NOx removal system of claim 14 wherein said heater comprises a screw member disposed in a cylindrical housing.